South East Asian J. of Mathematics and Mathematical Sciences
Vol. 18, No. 1 (2022), pp. 325-332

ISSN (Online): 2582-0850

ISSN (Print): 0972-7752

SOME RESULTS ON ATOMI GRAPH OF THE LATTICES

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(**Received:** *Feb. 03, 2021* **Accepted:** *Dec. 08, 2021* **Published:** *Apr. 30, 2022)*

Abstract: This paper deals with an atomi graph of the finite lattices. Let L be a finite lattice with one atom denoted by L_a and $A(L_a) = \{x|$ there exist $y \in L_a$ such that $x \wedge y = a$, and $x, y \neq a$, a is an atom of the lattice$\}$. We defined a relation $x \wedge y = a$, and $x, y \neq a$ as the atomi of the lattice L_a. The atomi graph of the lattice L_a, is denoted by $\gamma(L_a)$, is a graph with the vertex set $A(L_a)$ and two distinct vertices $x, y \in A(L_a)$ are adjacent if and only if they are atomi. We study some properties of atomi graph of the lattices.

Keywords and Phrases: Diameter, connected graph, complete graph, regular graph, complete bipartite graph.

2020 Mathematics Subject Classification: 05E30, 05C76, 05C99.